

Challenges and Prospects for Sustainable Forest Management in Wondo Genet Area, Southern Ethiopia

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Abstract

Natural resources degradation, a major form of which is deforestation and de-vegetation, has become a serious problem in Ethiopia. At present, natural forests cover a tiny fraction of the country's total area and these are found in small patches mainly in the southern and southwestern parts. Such a patch of forest is found in Wondo Genet area, and it is owned and managed by four major organizations. The forests of these organizations are, however, disappearing at a fast rate which indicates existence of problems in the management approaches of the Organizations. The general objective of this study was to understand existing forest management approaches of the four organizations and indicate some directions towards a sustainable management of the forests. Data were generated through structured questionnaire survey, semi- structured interview, focus group discussion and field observation methods. Various documents from the organizations were also consulted. The results of the study revealed that the four organizations in the area have generally been following a coercive approach, and none of them has, as a result, been successful in protecting the forests from destruction. Lack of a participatory and well-defined management system, increasing scarcity of agricultural land and forest products, inadequacy of benefits to local people from the organizations and ineffectiveness of local administration system in dealing with illegal forest users were the major reasons for the failure. The study concludes by underscoring the need to devise a participatory forest management approach which aims at the co-existence of local people, forest resources and the organizations in the area.

Keywords: *forest management, rural livelihoods, participation, sustainability, Wondo Genet*

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Introduction

In Ethiopia, natural resource degradation has become a serious environmental problem. Deforestation, which is occurring at an alarming rate, is one of such problems. In a year, 150,000 to 200,000 ha of forests, i.e. about 6% of the remaining forest of the country are cleared (Ministry of Natural Resource (MoNR) 1993). Currently only 2.4% of the total land of the country is under forest cover though it was estimated to have been about 34% in the past (Daniel 1988; Shibru and Kifle 1999). The fast growing population with increasing demand for farmland and wood for construction and fuel, political unrest, forest fire, insecure land tenure system, inappropriate conservation approaches and lack of awareness are the most commonly mentioned factors for deforestation in the country (Aklilu 2001; UNDP/ World Bank 1988).

Deforestation has many repercussions that include soil, water and biodiversity degradation. Recognizing the potential impacts of resource degradation, some measures have been taken towards resource conservation in the country. These include establishment of protected areas like parks, game reserves and sanctuaries and mobilization of people to construct physical soil conservation structures for reforestation through food-for-work programs. Nonetheless, the measures taken could not guarantee long lasting protection and preservation of the country's resources (Dessalegn 2001; Feycra, undated; Humi and Ludi 2000). At present, only patches of forests remain in the country, mainly in the western and southwestern parts. One such forest is found in Wondo Genet area.

The forest in Wondo Genet area is presently managed by four organizations. These are the former Wondo Genet Yanasse Participatory Forest Development (WGYPFD) Project (currently State Forest), Wondo Genet College of Forestry (WGCF), Wondo Genet Essential Oils Research Center (WGEORC) and Wondo Genet Wabi Shebelle Hotel (WGWSH). The State Forest (WGYPFD) covers 2102 ha of land that constitutes degraded hilly sides, and natural and plantation forests in the area. Some of the objectives of this organization are conserving and rehabilitating the remaining natural forest. The college has about 1000 ha of land, which comprises mostly natural forest, plantation forest, farmland and residential areas. The natural and plantation forests serve the College as laboratory for practical teaching and research purposes. The WGEORC and WGWSH own 80 ha and 54.4 ha of land, respectively, with varied resources. Natural and plantation forests cover most of the lands of WGWSH and WGEORC, respectively. The main purpose of the WGEORC is doing research on aromatic plants and herbs to select for industrial use.

Forest cover has been declining at an alarming rate in Wondo Genet area. This is because of expansion of agricultural land, cutting of trees for fuel, construction, charcoal making and pit-sawing, which are the manifestations of population pressure as well as failure in property rights institutions. Land once covered by natural forest is now converted into agricultural land and settlement. For instance, according to Belaynesh (2002) in 1977, 13% of the Wondo Genet catchment was under natural forest but in 2000 it was reduced to 2%. This has occurred despite the fact that the organizations

have been trying to protect the forests. The existing relationships between the organizations and the local people are thus not favorable for a sustainable management of the forests. The aim of this study was to understand existing forest management approaches of the four organizations and indicate some directions that may help the co-existence of local people, forest resources and organizations in the area. The specific objectives were to: (i) identify livelihoods of local people; (ii) assess the approaches the four organizations have been pursuing to conserve forests under their possession; (iii) assess the types and significance of opportunities as well as problems created by the organizations to the local people; and (iv) indicate some directions, from the results of study, for a sustainable management of forests in the area.

Natural Resource Management Approaches: Theoretical Context

Concern about changes in the environment was started over two millennia ago, when Plato wrote about hills of Attica in Greece that had lost forest cover. However, the idea of conservation was crystallized very recently (Talbot 1984), and initially natural resource conservation had taken the modernization approach (Pretty and Shah 1997; Talbot 1984). This approach emanates from the modernization framework, which “is firmly rooted in, and driven by, the enlightenment tradition of positivist science”. Modernization assumes technologies are universal and “implies that what has gone before is not as good as what we have now”. This framework has been influencing not only the approach to natural resource management but

also the thinking, practices and policies of development among others (Pretty and Shah 1997: 40).

In the modernization approach to resource conservation, scientists and planners identify problems such as severe degradation and search for rational solutions or technologies, which are tested under controlled environments to be taken up by farmers. Peasants are expected to change their previous practices which, most of the time, involve altering their livelihood to comply with new technologies. The basic assumption behind the modernization approach is that farmers are the cause of natural resource degradation such as deforestation, soil degradation and overgrazing. Thus, it recommends the exclusion of people from forests to protect trees and wild life and the adoption of externally developed conservation technologies (Pretty and Shah 1997).

Being influenced by modernization or traditional conservation approach, conservation policies of governments in Africa have been focused on the biological value of forests and ignored the people who depend on such resources (Feyera, undated). Local communities do not participate in planning for the management of resources. Under extreme scenarios, local communities were relocated to other places that broke down their tradition, culture and moral systems and livelihoods (Hurni and Ludi 2000). Communities, on their part, not infrequently protested conversion of resources to 'protected areas' when they faced resource scarcity to be able to sustain themselves and their livestock (Dessalegn 2001; Feyera, undated; Hurni and Ludi 2000).

In the modernization approach, responsibilities of forest conservation have been vested in states and its agencies. But it has never managed forestlands at its stake effectively simply because it lacks the resources (Carney and Farrington 1999; Swanson and Cervigni 1996). On the other hand, it has destroyed the local management system of forests and thereby disturbed local people's livelihood and expedited the rate at which this resource is converted to open access 'property'. Moreover, states have, in many cases, granted logging concessions to exploitative companies or privatized forestlands completely. The privatized forestlands have been subsequently converted into farms like ranching of cattle, which is of low productivity while the displaced people faced severe impacts on their livelihoods (Carney and Farrington 1999). Likewise in Ethiopia, the state owns most large forestlands mainly by expanding to the so-called 'forests not owned by any one'. There have been frequent encroachment and illegal utilization of these forests as the state was ineffective in controlling. Even three major waves of clearance of forests and woodlands owned by the state occurred in the country in the mid 1960s, late 1970s and early 1990s (Alula 2001; Dessalegn 1996). In addition, in the country, community forestry was promoted by the Imperial and the Derg governments with the intention to conserve natural resources and provide forest products to local communities. However, community forestry failed as "many peasants were not convinced of" its benefits among many other factors (Dessalegn 2001:54).

Generally, most of the conservation efforts in the modernization framework have not brought about lasting effects though they have conveyed considerable success in the short run (Pretty and Shah 1997; Talbot 1984). Under most circumstances, they aggravated resource degradation. The approach succeeds only with coercion and when external pressures were removed the local people reject the measures in place (Pretty and Shah 1997). As a response to this failure, an alternative approach to resource management has been developed starting from the mid-1980s and mid-1990s (Carney and Farrington 1999), and this is referred to as the postmodernism approach.

Postmodernism rejects the claim that resource management technologies have universal application. In this approach, the central issue is that people know best for themselves. So one has to listen to and actively seek after their voices, which are “authentic and legitimate”, and brings sustainable resource management (Pretty and Shah 1997:40). This new approach incorporates and glorifies the term ‘participation’ (Carney and Farrington 1999). Participation comprises the strategy to involve the beneficiaries in natural resource management. But there exists no consensus on the definition of participation and participatory approaches. Some view participation as a means to an end while others perceive it as an end in itself (Pretty and Shah 1997; Yeraswork 2000). Also some pay only lip-service to participation for reasons of its political usefulness (Brohman 1996; Chambers 1974). Thus, the ways participation is interpreted and used by different entities are many. These

range from manipulative and passive where people are told what is to happen and act out predetermined roles, to self mobilization, where, people take initiatives largely independent of external institutions (Pretty and Shah 1997: 53).

One has to be cautious in using and interpreting participation and reference must be made to the type of participation because most of the participation typologies like manipulation, passive involvement and consultation threaten the goals of projects rather than promoting. Such participation involves no more than telling what is going to happen or requiring responses to some questions where the locals respond, and contribution of resources like labor in return for food or cash to put into practice what has been already decided by 'outsiders'. In genuine participation, on the other hand, local people actively involve in decision-making, implementation of activities affecting their lives and sharing the benefits thereof (Pretty and Shah 1997). This approach is believed to bring many benefits that include enhancement of efficiency, transparency and accountability, empowerment of the poor and disadvantaged, mitigation of natural resource degradation, livelihood improvement, sense of belongingness and capacity to learn and act (Pretty and Shah 1997; Uphoff 1992; World Bank 1994).

In a real participatory (joint or collaborative or co-management) natural resource management, "two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given.....set of natural resources". Its end goals are sustainable use and conservation of the resource and equitable sharing of benefits and responsibilities related to it (Borrini-Feyerabend

2000:6). Though it may be expensive and involves a long process, co-management is effective as it makes use of knowledge, skills and resources of different stakeholders, makes sound decisions and internalizes socio-economic and ecological costs of resource degradation like food and fodder shortage (Borrini-Feyerabend 2000; Agrawal 2000). It is the approach that recognizes the importance of local capabilities and experiences in resource management (Skutsch 1999).

Rhetorically, participation has been widely in use in Ethiopia. During the Derg era, the forced public mobilization for tree planting and construction of physical soil conservation structures and penalization of people who failed to take part was said to be participation. In addition, natural resource conservation works through the food-for-work program was seen as participation. Nonetheless, results of such efforts have been short-lasting (Dessalegn, 2001). For example, during the 1980s terraces, check-dams and bunds were constructed massively mainly through the food-for-work and compulsory campaigns of which more than one-third broke the year after construction (SIDA 1984).

A genuine participatory approach to natural resource management has been lacking in Ethiopia. It is quite recently that non-governmental organizations have started initiating the approach in the country. Since 1996, for instance, Farm-Africa/ SOS Sahel have been trying to implement a participatory forest management in the Chilimo and Bonga forests (Irwin 2004). Though challenges have been encountered such as locales being skeptical and less collaborative due to bad experiences with the past government, positive

changes and impacts have been realized (Terefe 2002). The communities have demonstrated their ability in conserving forests. Besides, the participants, in Chilimo and Bonga, have widened their livelihood portfolios through complementary activities which include apiculture, agroforestry, private/ communal nurseries and horticulture.

Materials and Methods

Description of the Study Area

Wondo Genet is located in Awassa Zuria *Woreda* of Sidama Zone in the Southern Nations, Nationalities and Peoples' Region (SNNPR) at about 265 km to the south of Addis Ababa. Shashemene and Kofele *Woredas* of Oromia region border it in northwestern, northeastern and north, and eastern directions, respectively. It is located to the east of Awassa town. Topographically Wondo Genet comprises hills, rugged and depression areas with altitude varying between 1600m and 2580m asl (Belaynesፍ 2002). The four major organizations found in Wondo Genet and the forests at their stake occupy most of the northeastern parts of the area. The hillsides and their footslopes belong to these organizations.

Fertile soil, water, forest and wildlife are some of the natural resources Wondo Genet is endowed with. The valley plain of Wondo Genet has fertile soil. The area is also rich in water resources as four major streams: Wosha, Worqa, Hallo and Lango drain it. At the bottom of the hills there are many small springs. The water from these springs and streams support not only the local people and organizations in the area but also the nearby town of

Shashemene since 1974/5 (Zerihun 1999). The forest resource in the area is shared among the four Organizations mentioned above. The forest serves as habitat for many mammals, birds and insects (Cross 2003; Sim 1979). Different ethnic groups live in Wondo Genet area. The major ones are Sidama, Oromo, Walayita, Kambata, Hadiya and Amhara. Mainly Oromos inhabit Abaro and Bachil Gigissa *Kebeles* that are located in the surrounding. Population density is much higher in *Kebeles* at low-lying areas where it reaches up to 588p/ km² than *Kebeles* at the hilly parts (Abaro and Bachil Gigissa) (CSA 1996). People in the study area follow either Christianity or Islam religions; the majority of people living in Abaro and Bachil Gigissa are Muslims.

Data Sources and Methods of Analysis

The study used questionnaire survey, a method that allows capturing the perceptions of sample households on wider issues, to generate the required data. A total of 184 households were covered by the survey. The sample households were drawn through proportional simple random sampling technique from four *Kebeles*, which were selected purposively based on their proximity to the forest resources of the four Organizations. These were Wosha Soyama (71 households) and Gotu Onoma (33 households) from Awassa *Woreda*; and Bachil Gigissa (29 households) and Abaro (51 households) from Kofele and Shashemene *Woredas*, respectively. The variation in the number of samples from *kebeles* was as a result of differences in the total number of household heads living in the *kebeles* from which samples were taken proportionally. The other method of data

collection was group discussion with groups composed of elders, women, youth and landless household heads in the four *Kebeles*. The aim of the focus group discussion was to obtain critical reflections from the community on forest related issues and to triangulate data gathered through formal interviews. The Organizations', *Kebeles*' and *Woredas*' various written documents were also reviewed to collect data on the type of job opportunities and other benefits offered to local people, among others. Descriptive statistics and qualitative methods were used to analyze the data. Statistical Package for Social Sciences (SPSS 11.0) was used to analyze the data gathered through structured questionnaire. Data from focus group discussions were analyzed qualitatively.

Results and Discussion

Livelihoods of Local People

The local people in Wondo Genet area are engaged in diverse livelihood activities. About 76% of the sample households practice mainly mixed agriculture and the remaining are engaged in either crop production only (17%), trade, own small business, daily labor or hired in one of the four Organizations. There is a variation among the villages. In Abaro and Bachil Gigissa, for about 90% of the respondents, mixed agriculture is the mainstay of their livelihood while crop production is the major activity for the remaining. But, in Gotu Onoma and Wosha Soyama, 65% of the interviewed households are engaged mainly in mixed agriculture while 23% largely depend on crop production.

In the study area in general about 24% of the sample households obtain additional income from non-agricultural activities like fuelwood selling, trade and other similar activities. The remaining 76%, on the other hand, diversify their agriculture so as to meet the different needs of their families. These households tend livestock: cattle, sheep, goat and equines. In addition, they cultivate a number of crops: *enset*, maize, *chat*, *tef*, coffee and barley. Vegetables and tubers like cabbage, carrot, onion, potato and sweet potato are also grown. Fruits like avocado and banana are also produced, especially in Wosha Soyama. However, all crops do not cover equal areas and also differ in their importance as staple and cash crops in the sample *Kebeles*. In Gotu Onoma maize, *enset*, *tef* and potato; and in Wosha Soyama *enset*, sugarcane, *chat* and maize are the major crops covering large areas. On the other hand, households in Abaro and Bachil Gigissa cover most of their farmland by *enset*, barley, maize and potato. The major staple crop in Wondo Gnet area and its vicinity is *enset*. Next to *enset*, maize, barley and *tef* are important crops.

The farming households in the study area face many agricultural problems. These include land scarcity (e.g. average landholding size is 0.33 ha per household in Wosha Soyama), expensiveness of agricultural inputs like fertilizers and improved seeds and reduction in soil fertility. Land scarcity has forced households to reduce their livestock numbers, and productivity of their livestock has also decreased. As one elder in Abaro *Kebele* put it, because of reduction in productivity “the amount of milk one cow gives was not enough to even color a cup of coffee”. Moreover, the amount of water

for irrigation purpose in Wosha Soyama (where about 92% of the sample households irrigate their land) and Gotu Onoma (where 18% of the sample households do have irrigation land) is declining. Because of this, more than 40% of the households who have irrigable land face water scarcity. The major factors behind scarcity of water are increase in number of users (households and organizations) that use water from the same sources and drying up of some of the springs due to change in microclimate (rainfall) of the area.

Forest Management Approaches of the Four Organizations

The four major organizations in Wondo Genet area pursue more or less the same type of approach to manage their forests. This is described in the following subsections.

Wondo Genet College of Forestry

Wondo Genet College of Forestry has been trying to protect both plantation and natural forest resources it owns through a coercive approach. It has campus guards (presently there are 46 permanent and 36 contract) to protect its property including the forest. But most of its forest resource, especially the natural forest, is located far away from the built up area. This, among others, makes it difficult for protection by guards. As a result, its forest is left as more or less 'open access resource'. This open access resource covers the valley and the escarpments of Abaro and Bachil Gigissa *Kebeles* and it is being deforested at a fast rate mainly because of illegal settlement and timber producers. In the forest bordering Bachil Gigissa and Abaro

Kebeles alone around 80 households have settled, most of them came from these two *Kebeles* and *Kebeles* of the Awassa Zuria *Woreda*. In addition, there were temporary settlers who came from *Kebeles* in the area and other far areas like Aleta Wondo and North Shewa to produce timber. But its plantation forest which is found near the built up area is in good state.

There have been attempts to save the remaining forest from the college's side. The college has opened what is called 'social facilitator office' in August 2002 with the objective to improve the relationship between local people and the college to save its forest resource. The office conducted a number of consecutive consultative meetings with elders, religious leaders and administrators of *Kebeles* surrounding the college. The meetings created a forum for the college and the communities in its vicinity. Moreover, in collaboration with elders, religious leaders and administrators of *Kebeles* situated in and around Wondo Genet, College guards and members of defense force made attempts to seize illegal timber producers who resided temporarily in its forest at different times. The missions caused casualties though it brought short respite for the remaining few old-aged trees like *Aningeria adolfi fredric*. Nonetheless, households who have settled in natural forest bordering Abaro and Bachil Gigissa *Kebeles* were left aside and now they are quasi legal. District administrators seem to be reluctant to find ways to push them out.

Currently, the College is undertaking a very ambitious and huge research project named 'Development Oriented Interdisciplinary Thematic Action Research (DOIT-AR)' funded by the Swedish International Development Agency (SIDA). The project covers three research sites, of which Wondo Genet is one. In the area alone there are thirteen projects, which are hoped to lead to action or development activities that would benefit local people. The intention is that the beneficiaries of the projects will develop a sense of belongingness towards the forest resource of the College and that would lead to sustainable management. The effect of this initiative is yet to be seen.

Wondo Genet Wabi Shebelle Resort Hotel

Wondo Genet Wabi Shebelle Resort Hotel has no systematic approach in use to manage the forest resource at its stake. It has a few guards (10 permanent and 5 contract), who were hired mainly to protect the Hotel and to look after the forest near to the built up area. Surprisingly, the Hotel does not even know how much area of natural and plantation forest it owns. This shows how little effort the Hotel has been making to save the forest that belongs to it from destruction. But the same forest has a great role in the scenic beauty that attracts tourists to the area from which the Hotel is benefiting. Moreover, the Hotel has very little and weak interaction with local people. Its forest, particularly the natural forest, has been greatly degraded and it is only a small area in its vicinity that is in good shape. Fifteen households who had received compensation to leave the forest area of the Hotel have returned and settled on their previous land in 1991. The

Hotel could not evict those households reportedly because of little support from the local government.

Wondo Genet Essential Oils Research Center

The Center conserves its plantation forest that serves for the production of essential oils through the use of guards. Currently, the Center has 3 permanent and 19 contract guards. It has been trying to establish a strong protection system, but with little success. In many instances, as a key informant expressed, poachers were jailed although the police and the court released the culprits without monetary penalty. This condition encouraged people to break in to the plantation of the Center. The forest of the Center seems to be in good condition as compared with that of the other Organizations, mainly because the Center's forest is confined to the vicinity of the built up area where guards could patrol.

State Forest/ Former Wondo Genet Yanasse Participatory Forest Development Project

In 1996, the Awassa Zuria *Woreda* Rural and Agricultural Development Office (AZWRADO) took the operation area of Munessa Shashemene State Forestry Development in Wondo Genet. Up on receiving, the Office developed a project proposal and established Wondo Genet Yanasse Participatory Forest Development Project, a five-year project from 1998 to 2003, with the following objectives: (i) to rehabilitate and conserve the remaining natural forest, (ii) establish and manage plantation forest on degraded areas, (iii) introduce participatory forest management system

where local people would play key role, and (iv) derive benefits that would help development of the area. The approach pursued by the project to protect its forest was to teach local people about the importance of the forest so that the people manage the forest themselves. It has hired few forest guards (six). Nonetheless, the management was not successful mainly because of the acute shortage of farmland in the area that created strong desire on local people to clear the forest to get farmland. In addition, illegal timber producers had role in depleting the natural and plantation forests of the Project. Institutional instability (the transfer of ownership) also disfavored the establishment of strong system that could bring about a sustainable management approach.

The Awassa Zuria *Woreda* Rural and Agricultural Development Office that owns and tries to take care of both natural and plantation forests has faced some problems. The Office has no full-fledged authority on the forest resource. It can sell trees that cover up to only five hectares of land. Beyond this limit, it is the authority of the Regional Agricultural and Rural Development Bureau to sell depending on the management plan prepared by AZWRADO. By the time of fieldwork for this study, 188 ha (68 ha of Eucalyptus and 120 ha of *Cupressus lusitanica*) of forest were ready to be sold and management plans were prepared and sent to the Regional Bureau. The total estimated value of this resource upon selling was 3.195 million Birr. Of this income, as it was learned from a key informant, a quarter would be allocated for development works to benefit local people. With time passing, the density of those trees is decreasing because of high

exploitation by forest poachers. This can be witnessed when one sees wood from its eucalyptus plantation around Belle area transported by carts and carried by people to Shashemene early in the mornings and in the evenings.

Common Problems the Four Organizations Faced in Managing Forests

The forest in Wondo Genet area is located along the border between Oromia and SNNP Regional States. There is a strong fear among the bordering *Woredas'* administrators to take strong measures against illegal timber producers and settlers. This was because there has been age-old conflict between the Oromos (Arsi) and the Sidama people (Zerihun 1999). These people are now under different *Woredas* that border each other. The Sidamas inhabit the Awassa Zuria while the Oromos live in Kofele and Shashemene *Woredas*. As it was learned from informants, when some illegal timber producers, say from Bachil Gigissa would be caught in the forest and imprisoned in Awassa, some people particularly the illegal settlers and timber producers agitate others in their respective *Kebeles* to stand against the Sidama people and the opposite happens when illegal timber producers from Awassa Zuria would be caught and imprisoned in either Shashemene or in Kofele. The fear is that such happenings may lead to serious conflicts.

In addition, illegal timber producers caught and brought to court were released from prisons in few days without any monetary penalty. When they get back they harass *Kebele* administrators and other people who handed them in for imprisonment and even about two people in Abaro left the

Kebele due to the harassment, according to informants. Especially, people in Abaro and Bachil Gigissa had great fear of the illegal timber producers. They refrain from mentioning the names of these people. Even the Organizations believed that the illegal timber producers were equipped with latest arms and do have strong links with urban-based timber and woodwork traders who also supply them with other logistics like transportation. For instance, the poachers fired guns at forest guards and even at defense force members in March 2005 while they were trying to seize them. Also the traders were suspected to have strong ties with others like checkpoint people and district authorities. Surprisingly, the so-called traders transport timber by trucks freely particularly in the mornings, evenings and during night times, right from the forests all the way to Addis Ababa. In addition, the existence of other outlets to Addis Ababa than via Shashemene like Kofele-Asela-Addis Ababa helped the traders to easily transport illegally produced timber. Currently, there is a growing frustration among local people as the natural forest is depleting rapidly. Because of this disappointment, some local people have started poaching from the forest thinking that they should use it before it would be totally cleared by poachers who come from other areas.

Benefits from the Forest Management Approaches of the Organizations, Peoples' Participation and Future Prospects

Most local people perceived that the approaches the Organizations follow to manage their forests were not bringing benefits to them. They did not allow local people to satisfy their basic needs like fuelwood, to cut and carry grass for their livestock and wood for house construction among others. It was also ineffective approach where the participation of local people received little attention. The Organizations hold large forestlands they could not protect. Being under their control, vulnerability to degradation seems to have increased. Of the total interviewed households only 6%, 3.2%, 2.2% and 1.1% reported that their members got permission either to collect firewood or graze or cut and carry grass from the forests of WGYPFD, WGCF, WGEORC and WGWSH, respectively. These benefits were not officially granted to local people. Rather it was those households who had close links with guards that had such rights. Besides, only respondents from Wosha Soyama and Gotu Onoma obtained those benefits.

Regarding participation of local people in forest management, only 8.2% of the respondents who participated in consultative meetings organized by the Social Facilitator Office of WGCF considered themselves as participating in the protection of the forest of the college. The corresponding figure for WGYPFD was 4.3%. None of the sample households participated in protection of the forests of WGEORC and WGWSH. As a result of little benefits to local people that sprung from the management approaches of the organizations, some communities in the area use the forests illegally to

obtain different benefits. About 17% of the interviewed households reported that their members entered into the forests illegally in at least one of the forests of the organizations to collect fuelwood (8%), cut wood for timber production (4%), graze their livestock (2%), cut wood for construction (2%) and cut grass (1%). About 5% of the respondents whose members were using from the forests of the organizations without permission reported that at least one of their members was caught by the organizations. Some of them were released soon through begging the guards whereas others were jailed and paid penalties.

The interviewed households had different stands as to the appropriate measures to protect the forests of the organizations. About 23% of the respondents considered jailing poachers and forcing them to pay penalties as the best way to address the problem of deforestation in the area. But the rest argued that putting in prison and penalizing in terms of money may even aggravate the problem, as these people, when released, would cut more trees to replace the money they paid as penalty. As to the latter group, teaching, creating job opportunities, availing alternative sources of wood for fuel and construction are the best ways that would lead to sustainable forest management.

Organizations-related Opportunities and Problems

The coming of organizations to Wondo Genet area has had many impacts on the livelihoods of local people. Some of the impacts are positive while

others are negative from the perspective of the communities. These are briefly described below.

Opportunities/ Benefits

The four organizations covered in the study have been generating some benefits to local people. These include job opportunities and other benefits like the provision of seedlings, potable water and school services. Though the magnitude varies, the organizations have been hiring local people for their different activities. Table 1 shows some details about permanent and contract employees of WGCF. As it can be seen in the table, between 1998/9 and 2003/4 of the total permanent and contract employees of WGCF, 11% to 18% came from Wosha Soyama and 5% to 6% were from Gotu Onoma *Kebeles*.

Table 1. Permanent and contract employees of WGCF by permanent residence on employment date

Year	Wosha	Gotu Onoma	Other areas excluding	Total employees	
	Soyama		Abaro and B. Gigissa	N0.	%
	%	%	%		
1998/9	12.3	5.5	82.2	146	100
1999/0	11	5.8	83.2	155	100
2000/1	10.5	5.3	84.2	152	100
2001/2	17.6	5.6	76.9	216	100
2002/3	16.7	5.3	78.0	228	100
2003/4	18.6	6.2	75.2	242	100

Source: Budget and Finance Department of WGCF, March 2005.

In the case of WGEORC, between 1998/9 and 2003/4 the majority of its employees came from Wosha Soyama and Gotu Onoma *Kebeles*. Nonetheless, the proportions of workers from these *Kebeles* had decreased over the six years period (Table 2).

Table 2. Permanent and contract employees of WGEORC by permanent residence on employment date.

Year	Wosha	Gotu Onoma	Other areas excluding	Total employees	
	Soyama		Abaro and Bachil		
	%	%	%	N0.	%
1998/9	58.8	17.6	23.5	34	100
1999/0	55.6	16.7	27.7	36	100
2000/1	56.4	15.4	28.2	39	100
2001/2	55	15	30.0	40	100
2002/3	55	15	30.0	40	100
2003/4	47.8	13	39.1	46	100

Source: Archives of WGEORC, March 2005.

On the other hand, during the period from 2000/1 to March 2005, of the total employees of WGWSH, between 19.5% and 35.5 % were from Wosha Soyama. The proportion of people from Wosha Soyama had shown an increasing trend (Table 3).

Table 3. Permanent and contract employees of WGWSH by permanent residence on employment date

Year	Wosha	Other areas excluding	Total employees	
	Soyama	Abaro, B. Gigissa and G. Onoma	N0.	%
2000/1	19.5	80.5	41	100
2001/2	19.5	80.5	41	100
2002/3	18.6	81.4	43	100
2003/4	40.7	59.3	59	100
March 2005	35.5	64.6	68	100

Source: Archives of WGCF, WGEORC and WGWSH, March 2005

Regarding the State Forest (former WGYFPD project), most of its temporary workers (it has had no permanent employees) were from Wosha Soyama (50% to 42.4%) and Gotu Onoma (19.5% to 24.3%) during 1998 to 2004 (Table 4).

Table 4. Temporary employees of State Forest (former WGYFDP Project) by permanent residence on employment date.

Year	W. Soyama	G. Onoma	Other areas excluding Abaro and B. Gigissa	Total employees	
	%	%	%	No.	%
1998/9	46.3	19.5	34.1	41	100
1999/0	47.8	20.3	31.9	69	100
2000/1	50	22.2	27.8	18	100
2001/2	50	22.7	27.3	22	100
2002/3	46.0	24.3	29.7	37	100
2003/4	42.4	21.2	36.4	33	100

Source: Archives of AZWRADO, March 2005.

In addition to contract and permanent workers, WGCF and WGEORC hire temporary employees in large numbers. Particularly in the case of the latter Organization the number of temporary workers was greater than its contract and permanent workers. For instance, in 2003/4, WGEORC had 51 temporary workers of which 90% and 6% were from Wosha Soyama and Gotu Onoma *Kebeles*, respectively. In April 2005, there were 205 temporary workers at WGCF, of whom 56% and 20% came from Wosha Soyama and Gotu Onoma *Kebeles*, respectively. The two *Kebeles*, Wosha Soyama and Gotu Onoma, benefited more from the job opportunities generated by the Organizations. In the case of Abaro and Bachil Gigissa, no

single person was hired by any of the four Organizations mainly due to a relative geographical isolation of the *Kebeles*.

The four Organizations believed that they have been hiring many people from communities in their vicinity. Nevertheless, results of this study show that beneficiaries of job opportunities of the Organizations were not significant. Only 8.7%, 2.2% and 1.6% of the interviewed households' reported that at least one of their members got job opportunity in WGCF, WGEORC or the former WGYPPD project, respectively. Of the surveyed households, no one had gotten a member hired by Wabi Shebelle Hotel. In addition, the types of jobs made available to local people were daily labor, guard, janitor and agricultural works with low payments. The amount of money they earned varied between five Birr per day to about 300 Birr per month. In any case, the local people put WGCF at first rank in terms of generating job opportunities to local people followed by WGEORC and WGYPPD, in order.

Local people were dissatisfied with the current level of job opportunities the Organizations provided. They thought that the Organizations could have hired more people than they have done so far. About 91% of the respondents indicated that local people did not get enough job opportunities while the rest (all of them from Wosha Soyama and Gotu Onoma) were satisfied with what the Organizations rendered. As to the respondents, the major reasons for low job opportunities included the tendency of the Organizations to hire people from one *Woreda* i.e. Awassa Zuria (36.5%) where they are located, lack of necessary skills and training on the part of

local people to fit to vacant posts (24.6%), preference of the Organizations to hire people from other parts of the country and urban areas (21.6%) and lack of information on the part of local people (17.4%) (Table 5).

Table 5. Major reasons respondents cited why many local people did not get enough job opportunities in the four Organizations by *Kebele*.

Reasons	<i>Kebeles</i>				Total	
	G. Onoma	W. Soyama	Abaro	B. Gigissa	No.	%
	%	%	%	%		
Lack of information	17.2	29.3	9.8	6.9	29	17.4
Preferences of the Organizations to hire people from other areas and urban areas	37.9	39.7	3.9	-	36	21.6
Lack of skills	44.9	31	11.8	13.8	41	24.6
Hire only people from Awassa Zuria <i>Woreda</i>	-	-	74.5	79.3	61	36.5
Total	100	100	100	100	167	100

Source: Field Survey, March 2005.

Some of the four Organizations rendered other benefits to local people in their vicinity. For instance, WGCF provided many types of benefits in

addition to job opportunities to some local people. About 13% of the interviewed households reported that they received seedlings while 3.8% of the households obtained school service from the elementary school owned by the College. A few (2.7% of households) also received both potable water (constructed by the College) and school services. Again Gotu Onoma and Wosha Soyama were the most favored in getting the aforementioned benefits mainly because of their close locations to the College. Currently, the College has reopened an irrigation canal that passes through its compound that it used to cut off by negotiating with people. This water has enabled irrigation of some land in Gotu Onoma *Kebele*. The former WGYPPD rendered seedlings, but to only 7.1% of the respondents while the WGWSH Hotel allowed 0.5% of the interviewed households to bath for free in its hot spring. The WGEORC provided no other benefits to the local people.

Problems Created with the Coming of the Organizations

The coming of the Organizations to Wondo Genet has brought about not only benefits to local people but also problems. These include scarcity of resources like agricultural land, water and forest resources among others. The type and degree to which sample households faced the problems vary. Of the total respondents, about 36% reported that their members faced agricultural land scarcity because of the presence of these Organizations in the area. Some of them also held responsible the Organizations for the shortage of wood for fuel and construction (8.7% of households), for harassment while passing through the forests to market and other places

(7.1% of households) and for shortage of irrigation water (1.1% of households). The remaining households (47.3% of total), most of them from Abaro and Bachil Gigissa and located distant from the Organizations, mentioned no problems related to the coming of the Organizations into the area (Table 6).

Table 6. Types of major problems respondents faced with the coming of the four Organizations to Wondo Genet area.

Type of major problem	<i>Kebele</i>				Four <i>Kebeles</i>
	G. Onoma	W. Soyama	Abaro	B. Gigissa	
	%	%	%	%	%
Land scarcity	48.5	45.1	23.5	20.7	35.8
Scarcity of fuel and construction wood	12.1	12.7	2	6.9	8.7
Water scarcity	3	1.4	-	-	1.1
Harassment while going to market, and other places via the forests	6.1	5.6	5.9	6.9	7.1
No problem	30.3	35.2	64.7	65.5	47.3
Total	100	100	100	100	100

Source: Field Survey, March 2005.

Only a few of the interviewed households (7.2% of total) considered the creation of job opportunities by the Organizations as an effort to get rid of the problems that have emerged due to their presence. The remaining sample households had the opinion that the Organizations did nothing to at least lessen the impact of the problems the communities faced due to their existence.

Conclusions

Local people in and around Wondo Genet obtain their livelihoods mainly from agriculture and natural resources. Most of the households are engaged in mixed agriculture. Other activities like daily labor, working in the Organizations, running private small businesses, illegal timber production, charcoal and fuel wood selling are also important in the area. The latter activities exert great pressure on the remaining patches of forest in the area.

The four Organizations in Wondo Genet area: WGCF, WGEORC, WGWSH and the former WGYPFD/ the State Forest have been trying to conserve the forest resources they possess. The management approaches they have been pursuing were characterized by coercive and partly absence of planned management systems. It was in line with the modernism approach of natural resources management. It would be effective as far as the guards of the Organizations were around and able to safeguard the forest. But it is a costly venture to hire as many guards as would be required and also to supervise and control any abuse of authority by the guards themselves. So the failure of the approach was not unexpected as resource

management in a modernism approach has rarely led to success. Moreover, there existed little cooperation from the sides of neighboring district administration, judiciary, police and checkpoints to catch and prosecute forest poachers.

Sense of belongingness was lacking from most of the local people regarding the forests of the Organizations. This was because little benefits emanated to them from their management approaches. Few were allowed informally either to collect firewood, graze livestock or cut grass. In addition, the types of jobs the Organizations made available to the local people were mainly temporary daily works with low payment. The job opportunities they generated were considered as insufficient and inequitable (only few of the nearby *kebeles* benefited). Those job opportunities and other opportunities (e.g. provision of seedlings) could not motivate most households to consider the Organizations and their forests as something from which they would benefit and should take care of, to sustain benefits. Linking households' problems like shortages of land, forest products and water with the coming into the area of the Organizations also has had a negative impact on the attitudes of local people. The Organizations made little attempt to mitigate those problems, which has contributed to weakening of the relationships between the Organizations and the local people.

Given the fact that the modernism approach being pursued by the Organizations has apparently been unfavorable and ineffective, a participatory approach, or the postmodernism approach, where local people should have a say and share the benefits from the resources of the forest

must be seriously considered. As much as possible the Organizations need to create alternative sources of wood for construction and fuel, and equitable job opportunities to local people. Teaching local people regarding the value of forests has to come before jailing and penalizing in cases of offence. In other words, the Organizations have to switch from the modernism to the postmodernism approach so as to move into the direction of a sustainable forest management with improved local livelihoods.

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